

GLOSSARY



AFM Air Force Manual

anchor irons of special form used to connect timbers or masonry

anchor bolts bolts which fasten columns, girders, or other members to concrete or masonry

apron a plain or molded finish piece below the stool of a window; covers the rough edges of plaster

attn attention

backing the bevel on the top edge of a hip rafter that allows the roofing board to fit the top of the rafter without leaving a triangular space between it and the lower side of the roof covering

balloon frame the lightest and most economical form of construction. The studding and corner posts are set up in continuous lengths from the first-floor line or sill to the roof plate.

baluster a small pillar or column used to support a rail

balustrade a series of balusters connected by a rail; generally used for porches, balconies, and such

band a low, flat molding

base the bottom of a column; the finish of a room at the junction of the walls and floor

base molding the molding on the top of a baseboard

batten (cleat) a narrow strip of board fastening several pieces together

batten door a door made of sheathing and reinforced with strips of board nailed crosswise

batter board a temporary framework for locating the corners when laying a foundation

batter pile a pile driven at an angle to brace a structure against lateral thrust

bd ft board feet

beam an inclusive term for joists, girders, rafters, and purlins

bedding a filling of mortar, putty, or other substance in order to secure a firm bearing

bed molding a molding used to cover the joint between the plancier and frieze (horizontal decorative band around the wall of a room); also used as a base molding on heavy work and sometimes as a member of a cornice

belt course a horizontal board across or around a building; usually made of a flat member and a molding

bent a single, vertical framework consisting of horizontal and vertical members supporting the deck of a bridge or pier

bevel board (pitch board) a board used to lay out bevels in framing a roof or stairway

bird's mouth a cutout near the bottom of a rafter; fits over the rafter plate

blind-nailing driving nails so that the holes are concealed

board lumber less than 2 inches thick

board foot the equivalent of a board 1 foot square and 1 inch thick

boarding in the process of nailing boards on the outside studding of a house

bollard a steel or cast-iron post to which large ships are tied

BOM bill of materials

braces pieces fitted and firmly fastened to two others at any angle; used to strengthen the angle thus treated

bracket a projecting support for shelves or other structures

break joints to arrange joints so that they do not come directly under or over the joints of adjoining pieces, such as in shingling and siding

bridging pieces fitted in pairs from the bottom of one floor joist to the top of adjacent joists and crossed to distribute the floor load; it can also be pieces of width equal to the joists and fitted neatly between them

building paper cheap, thick paper used to insulate a building before the siding or roofing is put on; sometimes placed between double floors

built-up member a single structural component made from several pieces fastened together

built-up timber a timber made of several pieces fastened together, forming one piece of larger dimension

butt joint a joint made by fastening two end pieces together without overlapping

camber the angle cut in a piece of wood (such as a joist) to match an adjacent member (such as a rafter)

carriages the supports, or the steps and risers, of a flight of stairs

casement a window in which the sash opens on hinges

casing the trimming around a door or window opening, outside or inside; the finished lumber around a post or beam

CB circuit breaker

ceiling narrow, matched boards; sheathing of the surfaces that enclose the upper side of a room

center-hung sash a sash hung on its centers so that it swings on a horizontal axis

chamfer a beveled surface cut on the corner of a piece of wood

checks splits or cracks in a board, ordinarily caused by seasoning

chock heavy timber fitted between fender piles along the wheel guard of a pier or wharf

chord the principal member of a truss on either the top or bottom

clamp a mechanical device used to hold two or more pieces together

clapboards a special form of outside covering of a house; a type of siding

cleats metal arms extending horizontally from a relatively low base, used for securing small ships, tugs, and work boats

cm centimeter(s)

collar tie usually a 1 x 4 or a 1 x 6 fastened in a horizontal position to secure the upper ends of rafters together; placed on every other rafter system

column a square, rectangular, or cylindrical support for roofs, ceilings, and so forth

combination frame a combination of the principal features of the full and balloon frames

common rafter a rafter which runs square with the plate and extends to the ridge

cone concrete

concrete an artificial building material made by mixing cement and sand with gravel, broken stone, or other aggregate, plus sufficient water to cause the cement to set and bind the entire mass

conductors pipes for conducting water from a roof to the ground or to a receptacle or drain; downspout

const construction

cornice the molded project that finishes the top of the wall of a building

counterflashings strips of metal used to prevent water from entering the top edge of the vertical side of a roof flashing; allows expansion and contraction without danger of breaking the flashing

cripple rafter rafters that cut between valley and hip rafters

cross brace bracing with two intersecting diagonals; also refers to the top surface of a piece of wood that has been cut at an angle to match an adjacent member

d penny

DA Department of the Army

dado a rectangular, square-based groove cut across the full width of a board and commonly used to form joints; a rectangular groove cut. Dados are used in sliding doors and window frames.

dado joint a joint formed by two intersecting boards, meeting at right angles, and with the end of one notched into the other for half the second board's thickness

deadening construction intended to prevent the passage of sound

dead load a permanent load on a building or other structure, which includes the weight of its structural members and the fixed loads they carry

decking the heavy plank floor of a pier or bridge

df double flow

dn down

diam diameter

diagonal inclined member of a truss or bracing system used for stiffening and for wind-bracing

double-hung window a window with an upper and a lower sash, each with sash cords and weights

dovetail joint a joint made by cutting pins the shape of dovetails, which fit between dovetails onto another piece

drawboard joint a mortise-and-tenon joint with holes bored so that when a pin is driven through, the joint becomes tighter

drip the projection of a window sill or water table to allow the water to drain clear of the side of the house below it

ea each

elev elevation

end-lap joint a joint formed at the corner where two boards lap. Each board is cut away to half its thickness and they are halved to a distance equal to their width so that they are flush when fitted together

F Fahrenheit

fascia a flat member of a cornice or other finish; generally, the board of the cornice to which the gutter is fastened

fender pile the outside row of piles that protects a pier or wharf from damage by ships

fishplates metal plates, fastened to each side of a butt splice for support

fished joint an end butt splice strengthened by pieces nailed on the sides

filler a piece used to fill the space between two surfaces

fin finished

flashing the material used and the process of making watertight the roof intersections and other exposed places on the outside of the house

flr floor

flue the opening in a chimney through which smoke passes

flush even, adjacent structural surfaces, or those in the same plane

flush joint a mortar joint formed by cutting extra mortar away from the wall

FM field manual

footing an enlargement at the lower end of a wall, pier, or column that distributes the load

footing form a wooden or steel structure placed around the footing to hold the concrete to the desired shape and size

foundation that part of a building or wall that supports the superstructure

frame the timber skeleton of a building and the surrounding or enclosing woodwork of windows, doors, and so forth

frame box a window frame with boxes to contain the sash weights

framing the rough timber structure of a building, including interior and exterior walls, floor, ceiling, and roof

ft foot, feet

furring narrow strips of board nailed upon the walls and ceiling to form a straight surface upon which to lay the laths or other finish

gable the vertical, triangular end of a building from the eaves to the apex of the roof

gal gallon

gauge a tool used by carpenters to strike a line parallel to the edge of a board

gambrel a symmetrical roof with two different pitches or slopes on each side

girder a timber used to support wall beams or joists

girt (ribboned) the horizontal member of the walls of a full or combination frame house that supports the floor joists or is flush with the top of the joists

GL ground level

glued joint a joint held together with glue

grade the horizontal ground level of a building or structure

groove a long, hollow channel cut by a tool into which a piece fits or in which it works. Two special types of grooves are the dado and the housing.

ground a strip of wood assisting the plasterer in making a straight wall; also, a place to which the finish of the room may be nailed

ha hectare

half-lap joint two pieces joined by cutting away half the thickness of each so that they fit flush into each other

halved joint a joint made by cutting half the wood away from each piece to bring the side flush

hanger a vertical-tension member supporting a load

header a short joist into which the common joists are framed around or over an opening

head jamb (yoke) the top horizontal member of a door or window frame

headroom the clear space between floor and ceiling, as in a stairway

heel of a rafter the end or foot that rests on the wall plate

hip rafter rafters extending from the outside angle of the plates toward the apex of the roof

hip roof a roof that slopes up toward the center from all sides, necessitating a hip rafter at each corner

housed joint a joint in which one piece is grooved to receive the other

housing a groove cut at any angle with the grain and part way across the piece; housings are used for framing stair risers and treads in stringers

hypotenuse the length of a rafter

in inch(es)

jack rafter a short rafter framing between the wall plates; a hip rafter

jamb the side piece or post of an opening; sometimes applied to the door frame

joists timbers supporting the floorboards

kerf the cut made by a saw

km kilometer(s)

knee brace a corner brace, fastened at an angle from the wall stud to the rafter, stiffening a wood or steel frame to prevent angular movement

kraftpaper strong, brown paper used for a variety of building needs

lap joint a joint of two pieces lapping over each other

laths narrow strips which support plastering

lattice crossed wood, iron plate, or bars

lb pound(s)

ledgers the support for the second-floor joists of a balloon-frame house or for similar uses; ribband

level a term describing the position of a line or plane when parallel to the surface of still water; a tool used for testing horizontal and vertical surfaces and for determining differences of elevation

lgth length

lin ft linear feet

lintel (cap) a horizontal structural member spanning an opening and supporting a wall load

lip molding a molding with a lip which overlaps the piece against which the backing of the molding rests

live load the weight a building must bear due to the combination of furniture, other movable objects, and the people who occupy the building

lookout the end of a rafter, or the construction that extends beyond the sides of a house to support the eaves; also the projecting timbers at the gables, supporting the verge boards

louver a type of window (usually in peaks of gables and the tops of towers) provided with horizontal slats, which exclude rain and snow and allow ventilation

lumber sawed parts of a log such as boards, planks, scantling, and timber

m meter(s)

matching (tongue-and-groove) the method used in cutting the edges of a board to make a tongue on one edge and a groove on the other

max maximum

meeting rail or check rail the bottom rail of the upper sash of a double-hung window

member a single piece complete in itself, within a structure

mi mile(s)

min minimum

miter the joint formed by two abutting pieces meeting at an angle

mm millimeter(s)

mortise the hold, generally rectangular, for a tenon or any such hole cut into or through a piece by a chisel

mortised joint a joint made by cutting a hole or mortise in one piece—and a tenon, or piece to fit the hole, upon the other

mullion the construction between the openings of a window frame to accommodate two or more windows

muntin the vertical member between two pieces of the same panel work; the vertical sash bars separating the different panels of glass

N North

NCOIC noncommissioned officer in charge

newel the principal post at the foot of a staircase; also the central support of a winding flight of stairs

nmi nautical miles

no. number

nosing the part of a stair tread that projects over the riser or any similar projection; a term applied to the rounded edge of a board

O.C. on center

p pile

pad eyes metal rings vertically mounted on a plate; used for tying small vessels

parting bead the strip or bead that separates the upper and lower sashes of a window (also called a parting strip)

partition a permanent interior wall that divides a building into rooms

partition, nonbearing a dividing wall that separates areas of a structure but does not provide support for the room, overhead partitions, or floor joists

pc pieces

picture molding a molding shaped to form a support for picture hooks, often placed on the wall at some distance from the ceiling to form the lower edge of the frieze

pier timber, concrete, or masonry supports for girders, posts, or arches; intermediate supports for adjacent ends of two bridge spans; or a structure extending outward from the shore into the water, used as a dock for ships

piers masonry supports set independent of the main foundation

pilaster a portion of a square column, usually set within or against a wall

piles long posts driven into swampy soil or wherever it is difficult to secure a firm foundation upon which to lay the footing course of masonry or other timbers

piling large timbers or poles driven into the ground or the bed of a stream to make a firm foundation

pitch inclination or slope, as for roofs or stairs; the rise divided by the span

pitch board a board sawed to the exact shape formed by the stair tread, riser, and slope of the stairs and used to lay out the carriage and stringers

plan a horizontal, geometrical drawing of a building showing the walls, doors, windows, stairs, chimneys, columns, and other structural components

plank a wide piece of sawed timber, usually 1 1/2 to 4 1/2 inches thick and 6 inches or more wide

plaster a mixture of lime, hair, and sand (or of lime, cement, and sand) used to cover outside and inside wall surfaces

plate the top, horizontal piece of the walls of a frame building upon which the roof rests

plate (or seat) cut the cut at the bottom end of a rafter that rests upon the top of the plate

plot plan (site plan) a drawing showing all necessary property lines, contours, building lines, building locations, existing or new buildings, and utility easements

plow to cut a groove running in the same direction as the grain of the wood

plumb cut any cut made in a vertical plane; the vertical cut at the top end of a rafter

ply a term used to denote a layer or thickness of building or roofing paper (such as two-ply or three-ply)

porch an exterior, ornamental entranceway

post a timber set on end to support a wall, girder, or other members of the structure

prefab prefabricated

pulley stile the member of a window frame that contains the pulleys and between which the edges of the sash slide

purlin a timber supporting several rafters at one or more points, or the roof sheathing directly

PX post exchange

qty quantity

R riser

rabbet a corner cut out of an edge of a piece of wood

rabbet joint two pieces of timber, rabbeted and fit together

rafters beams that slope from the ridge of a roof to the eaves making the main body of the roof's framework

rail the horizontal members of a balustrade or panel work

rake the trim of a building extending in an oblique line, as rake, dado, or molding

rake molding the cornice on the gable edge of a pitched roof, the members of which are made to fit those of the molding of the horizontal eaves

return the continuation of a molding or finish of any kind in a different direction

ridge the top edge or corner formed by two intersecting roof surfaces

rise the vertical distance through which anything rises, as the rise of a roof or stair

riser the vertical board between two treads of a flight of stairs

RL random length

rm room

roof decking the layer of wood or plywood applied directly to the rafters, under the shingles

roofing the material put on a roof to make it weatherproof

rub joint a glued joint made by carefully fitting the edges together, spreading glue between them, and rubbing the pieces back and forth until they adhere

rubble roughly broken quarry stone

rubble masonry uncut stone, used for such things as rough work, foundations, and backing run the horizontal length of a piece, such as a rafter, when it is in position

S switch

saddle board the finish of the ridge of a pitched roof house; sometimes called *comb board*

sash the framework that holds the glass in a window

sash lift a metal hook, bar, or plate attached to a sash to enable lifting and lowering of the window

sawing, plain lumber sawed regardless of the grain, the log simply squared and sawed to the desired thickness

scab a short piece of lumber used to splice or prevent movement of two other pieces

scaffolding or staging a temporary structure or platform enabling workmen to reach high places

scale a short measurement used as a proportionate part of a larger dimension; the scale of a drawing is frequently expressed as 1/4 inch = 1 foot

scantling lumber with a cross section ranging from 2 by 4 inches to 4 by 4 inches.

scarfed joint a timber spliced by cutting various shapes of shoulders or jogs which fit each other

scarfing a joint between two pieces of wood allowing them to be spliced lengthwise

scotia a hollow molding used as part of a cornice and often under the nosing of a stair tread

scribing marking a piece of wood to provide for fitting one of its surfaces to the irregular surface of another

section a drawing showing the type, arrangement, and proportions of the various parts of a structure. It is assumed that the structure is cut by a plane, and the section is the view gained by looking in one direction.

shakes imperfections in timber caused by high winds or imperfect growth conditions

sheathing wallboards or roofing boards; generally applied to narrow boards laid with a space between them, according to the length of a shingle exposed to the weather

sheathing paper (building paper) the paper used under siding or shingles to insulate the house

shingles thin, oblong pieces of wood or other material, thinner at one end, used for covering roofs or walls

siding the outside finish between the casings

sills the horizontal timbers of a house which either rest upon the masonry foundation or, in the absence of such, form the foundation

sizing working material to the desired size; a coating of glue, shellac, or other substance applied to a surface to prepare it for painting or other finishing

sleeper a timber laid on the ground to support a floor joist

sole the horizontal member on which the studs bear

spac spacing

span the distance between the bearings of a timber or arch

specifications written or printed directions regarding the details of a building or other construction

spirit level an instrument for measuring the exactness of the horizontal or vertical position of a building or structure member

splice joining of two similar members in a straight line

sq cm square centimeter(s)

sq ft square foot, feet

sq in square inch(es)

sq km square kilometer(s)

sq m square meter(s)

sq mi square mile(s)

sq yd square yard(s)

square a tool used by carpenters to obtain accuracy; a term applied to a surface area of 100 square feet

stairs, box those built between walls, usually having no support except the walls

standing finish term applied to the finish of the openings and the base and all other interior finish work

stringer a long, horizontal timber in a structure supporting a floor

stucco a fine plaster used for interior decoration and fine work; also used for rough outside wall coverings

stud an upright beam in a building framework

studding the framework of a partition or the wall of a house; usually referred to as 2 x 4s

subfloor a wood floor laid over the floor joists on which the finished floor is laid

threshold the beveled piece over which the door swings; sometimes called a carpet strip

tie beam (collar beam) a beam so situated that it ties the principal rafters of a roof together and prevents them from thrusting the plate out of line

timber lumber with a cross section more than 4 by 6 inches, such as posts, sills, and girders

tin shingle a small piece of tin used for flashing and repairing a shingle roof

TM technical manual

TO theater of operations

toenailing driving a nail, spike, or brad at an angle into the end of one piece of wood to fasten it to a second piece; avoids having the nails show above the surface

top plate a piece of lumber supporting the ends of rafters

to the weather a term applied to the projection of shingles or siding beyond the course above

TRADOC United States Army Training and Doctrine Command

tread the horizontal part of a step

trim a term sometimes applied to exterior or interior finished woodwork and the finish around openings

trimmer the beam or floor joist to which a header is framed

trimming putting the inside and outside finish hardware on a building

truss structural framework of triangular units, used in place of rafters, for supporting loads over long spans

US United States

USAES United States Army Engineer School

valley rafter rafters extending from an inside angle of the plates toward the ridge or centerline of the house

valleys the internal angle formed by the two slopes of a roof

verge boards the boards that serve as the eaves' finish on the gable end of a building

vestibule an entrance to a house; usually enclosed

W watts

WH wall hung

wainscoting matched boarding or panel work covering the lower portion of a wall

wale a horizontal beam

wash the slant on a sill, capping, and so forth, to allow water to run off easily

water table the finish at the bottom of a house that carries water away from the foundation

wharf a structure that provides berthing space for vessels, to facilitate loading and discharge of cargo

wind a term used to describe the surface of a board when twisted (winding) or when resting upon two diagonally opposite corners, if laid upon a perfectly flat surface

wooden brick a piece of seasoned wood, made the size of a brick, and laid where necessary to provide a nailing hold in masonry walls